

## REMARKS

### I. ABSTRACT

The Office Action, page 2, provides a reminder of the requirements for an abstract. The Applicants appreciate the reminder; however, the Office Action has not actually objected to specific aspects of the abstract or required that the abstract to be amended. Nonetheless, to expedite the prosecution the abstract is amended herein. The amendment to the abstract removes the phrase “is disclosed.” The word “thereto” is removed from the abstract, and the number of words in the abstract is now less than 150. Therefore, the abstract now complies with the Office Action’s reminder.

### II. REJECTIONS BASED ON PRIOR ART

The Office Action rejected claims 1-5, 7-10, 15-17, and 20 under 35 USC 102(e) as being allegedly anticipated by Bernhard et al. The Office Action rejected claims 11-14 under 35 USC 102(e) as being allegedly anticipated by Baum et al. The Office Action rejected claim 6 under 35 USC 103 as being allegedly unpatentable over Bernhard et al. in view of Day II et al. The rejections are respectfully traversed.

#### A. INDEPENDENT CLAIM 1 (*Bernhard et al.*)

Claim 1 recites a directory-enabled network element. Regarding claim 1, the Office Action states at paragraph 5, page 3, “Bernhard teach a directory-enabled network element (see abstract; col. 9, lines 59-67 to col. 10, lines 1-61).” This is incorrect. The abstract mentions “network elements” but not a directory enabled network element as claimed. The abstract discusses deploying “active response modules (ARMs)” into an intrusion detection system, and mentions that there are many types of ARMs. ARMs are not directory enabled. The Office Action does not explain and it is not clear what part of

the abstract allegedly discloses a “directory enabled network element.” The words “directory” and “enabled” do not appear in the abstract. Clarification is requested.

Column 9, lines 59-67, and column 10, lines 1-61, (i.e., column 9, line 59 through column 10, line 61) comprise a long passage about which the Office Action gives no further explanation. As best understood by Applicants, no part of this passage discloses a directory enabled network device. The Office Action gives other citations of long passages without sufficiently stating how the passages apply to the claims. Accordingly, Applicants cannot determine how to respond to the rejections because the rationale of the Office Action is not specific. An explanation of how and which parts of the passages cited allegedly disclose “a directory-enabled network element” is respectfully requested.

Column 9, lines 59-67, and column 10, lines 1-61 discuss a fix-it ARM. As best understood by Applicants, the Office Action contends that the fix-it ARM is a directory-enabled network device. This is incorrect. The fix-it ARM is said to utilize the cache of a computer system to store a backup of data contained in a user-specified directory, but the disclosed directory is not the same as referenced in Claim 1. In the computer field, the term “directory” is overloaded—it can mean either a filesystem for computer files, or an information repository storing identifying information about elements in a network such as printers, workstations, servers, routers, users, and groups.

The term “directory,” as used in Bernhard et al., refers to a hierarchical system of folders for organizing files on a computer. For example, column 9, lines 60-61 refer to “the files within those directories.” In contrast, in the present application the term “directory” refers to a network directory server or directory service. Examples of network directory services include implementations of the ITU Recommendation X.500, repositories that store information about network elements and are accessed using

Lightweight Directory Access Protocol (LDAP), Microsoft Active Directory, etc. For example, Applicants' background section describes directory services (specification, page 4). Further, Applicants' field of the invention section states that the "The present invention relates to a method and apparatus for enabling a network element to connect to a *directory service* of a data communications network, authenticate itself to the *directory service*, and provide *directory-enabled* intelligent network services" (emphasis added).

A proper rejection under 35 U.S.C. 102 must rely on a reference that shows each and every element of a claim, arranged as in the claim. If any element is missing, a rejection based on anticipation is unsupported. Because Claim 1 refers to directory services, and not a filesystem directory, Bernhard et al. does not anticipate Claim 1. Applicants are the first to disclose a network element with the integral capability to communicate with a network directory service. Reconsideration and withdrawal of the rejection is respectfully requested.

B. INDEPENDENT CLAIMS 11 AND 13 (*Baum et al.*)

Claim 11 recites a directory-enabled packet router for a packet-switched network. The Office Action states (page 9) states that "Baum teach a directory-enabled packet router for a packet-switched network (see col. 3, lines 48-64)." Regarding claim 13, the Office Action (page 10) also cites the abstract, column 2, line 60, through column 3, line 14 and column 3, lines 41-64.

The cited passages of Baum do not support a §102 rejection. In particular, column 3, lines 48-64, merely identifies a "directory services object 114 ... coupled to a packet switched IP routed network 106." This passage does not disclose a packet router that is directory-enabled, as claimed. As clarified in Applicants' specification, a "directory-enabled" router is one that internally contains functional elements that can communicate

with a directory service, such as an X.500 directory, LDAP directory, etc. Baum fails to state the nature of how the directory services object and the packet switched IP routed network are “coupled,” and specifically does not disclose that devices in the network internally contain logic for interacting with the directory services object. Therefore, any elements within the Baum IP routed network cannot be considered to be directory enabled network devices.

Indeed Baum provides no disclosure in the passages cited by the Examiner of switches or routers of network 106 actually communicating with directory services object 114. There is no disclosure of a “data switch” or a “packet router” that is enabled to communicate with the directory services object 114. Moreover, Baum actually teaches away from the subject matter of Applicants’ claims. For example, column 4, lines 38–42 of Baum state that “One example of the call initiation procedure is now described ... 1. The PC user initiates a call via the PC's voice over IP (V/IP) software. This software application invokes the directory 114 to obtain the IP address of the destination gateway.” Thus, the user’s IP software invokes the directory. There is no suggestion that a router, data switch, or any other network element could invoke the directory to obtain IP addresses. The packet router switches are not used to communicate with the directory services object.

For the foregoing reasons, Baum fails to anticipate the subject matter of Claim 11. Reconsideration and withdrawal of the rejection are respectfully requested.

C. INDEPENDENT CLAIMS 15-16; DEPENDENT CLAIMS 2-10, 12, 14,  
AND 17-20

Independent claim 15 and 16 also feature a “directory-enabled network element,” and are therefore allowable for at least the same reasons as stated above with respect to Claim 1.

Similarly, dependent claims 3-10, 12-14, and 17-20 each depend, directly or indirectly, upon one of independent claims 1, 11, 15, or 16, and are therefore also allowable for at least the same reasons stated above with respect to the Claims 1 and 11. Further, claims 2-10, and 12-20 each contains subject matter that is independently patentable over claims 1 and 11.

For example, regarding claim 2, claims 3-5 and 7-10, and claims 15 and 16, the Office Action cites column 11, line 66, through column 12, line 41 of *Bernhard et al.* The cited passage does not support the rejection. In contrast, claim 2, 3-5, 7-10, 15, and 16 each recite a “directory enabled element ... configured to ... update directory information.” The cited passages appear in a section entitled “VI. Installing and Updating ARMs” describing two methods. The first method of *Bernhard et al.* FIG. 4A is “a configuration process 4000...used by sysadmin to configure the IDS 120...” The second method of FIG. 4B is “a (sic) update process 425 used by a sysadmin to update the IDS 120....” The sysadmin that performs the updating is a human and not a network element (see col. 11, line 54). A human sysadmin is not a network element. In Baum any querying, accessing, and updating of directory information is performed by the “sysadmin.” The ARM and the IDS are not directories or directory services as claimed. Column 11, line 66, through column 12, line 41, have no description of an ARM or any

other network device accessing, querying, and updating directory services or any other directory.

Claim 9 recites “a group policy interface... configured to receive and update the directory service with one or more definitions of directory services policies that apply to groups of network devices in the network ...” Claims 15-16 recite “A method of using a directory-enabled network element...; the method comprising ... obtaining policy information from the directory service...” As described in Baum at column 9, line 59, through column 10, line 61, the fix-it ARM attempts to fix corrupted files in the directories of Bernhard et al. by saving restoring (e.g., replacing) and deleting corrupted files. However, the fix-it ARM does not obtain or update *policy* from the files of the directory.

Further, the ARM responds to misuse and not to creating an event. In contrast, Claims 15-16 recite “creating an event ...; in response to occurrence of the event ... obtaining policy information from the directory service....” The fix-it ARM of Baum does not respond to the creation of an event related to the directories, as featured in Claims 15-16.

The Office Action contends that column 12, lines 7-42, teaches a network device receiving and updating policy by interfacing with a directory service. This is incorrect. The cited passage has no disclosure of a network device receiving and updating policy by interfacing with a directory service. With reference to Claims 15-16, the passages cited in the Office Action fail to disclose a network element “obtaining” policy “in response to an occurrence of ... [an] event” (i.e., on its own).

The Office Action contends that column 3, line 48, to column 4, line 14, of Baum anticipate the subject matter of dependent Claim 12 and Claim 14. This is incorrect. The

cited passages do not discuss anything about updating directory services as featured in the claims.

In view of the distinctions pointed out above, to expedite prosecution, the remaining features of claims 2-10, 12, and 14-20 are not addressed separately at this time.

D. NEW CLAIMS 21-26

New claims 21, 25 and 26, correspond to original claims 1, 11, and 13, respectively, except that new claims 21, 25, and 26 feature elements that are “directory services-enabled.” None of the cited art discloses network elements that are directory-services enabled. Therefore, new Claims 21, 25, and 26 are allowable for the same reasons stated above with respect to Claims 1, 11, and 13, respectively.

New claim 22 is similar in scope to new claim 21. However, new claim 22 recites that the “network element [is] enabled to interface with directory services.” New claim 23 is dependent upon claim 22 and also includes a capability of updating the directory services, similar to claim 2, and of obtaining policy, similar to the last paragraph of claim 9. Therefore, claim 23 is allowable for the same reasons identified above regarding claims 1 and 2 and the last paragraph of claim 9. New claim 24 specifies that the network element includes a protocol agent for interfacing with the directory services, thereby further clarifying the manner in which the network is enabled to interface with the directory services.

III. CONCLUSION

For the reasons set forth above, all pending claims are patentable over the art of record. Accordingly, allowance of all claims is hereby respectfully solicited.


The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application.

No extension fee is believed to be due. However, to the extent necessary,  
Applicants petition for an extension of time under 37 C.F.R. § 1.136. The Commissioner  
is authorized to charge any fee that may be due in relation to this application to our  
Deposit Account No. 50-1302.

Respectfully submitted,

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Dated: October 9, 2003

  
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**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop FEE Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 2213-1450.

on October 9, 2003 by 